LIST OF MARINE SHELLS COLLECTED IN THE NEIGHBOURHOOD OF ADEN BETWEEN 1892 AND 1901.

By Commander E. R. SHOPLAND.

Read 14th March, 1902.

The shells enumerated in the following list were, with the seven exceptions noted, collected within a radius of six miles from Steamer Point, Aden, chiefly on the shores of the Inner Harbour, by dredging in from three to eleven fathoms in and south of the harbour, and from the coral brought in from Little Aden for making lime.

All the species marked with an asterisk (*) have been described

from types now in the British Museum (Natural History).1

In compiling the list it has been considered advisable to follow a well-known work rather than attempt the almost hopeless task of adjusting the nomenclature to the latest standards. This list has therefore been drawn up in accordance with the "Catalog der Conchylien-Sammlung von F. Paetel."

CEPHALOPODA.

Argonauta tuberculosa, Lk.

GASTROPODA.

Ianthina fragilis, Lk.

Murex anguliferus, Lk.

, Carboneri, Jouss.

, clavus, Kien.

, cyclostomus, Sowb.

, fenestratus, Chem.

, haustellum, L.

, pinnatus, Wood.

, ramosus, L.

, rota, Sowb.

, sccundus, Lk.

, ternispina, Lk.

, varicosus, Sowb.

Pyrula paradisiaca, Mart.

Pisania Crosseana, Souverb.
,, ignea, Gmel.
,, ignea (sulcate variety).
,, picta, Rve.

,, situla, Rve.
Pollia contracta, Rve.
,, marmorata, Rve.

,, rubiginosa, Rve.

Fusus forceps, Perry.
Pleurotoma albifuniculata, Rve.

,, amicta, Smith. ,, Baynhami, Smith.

,, catena, Rve.

¹ Commander Shopland's collection was acquired by Mr. Hormusjee Cowasjee Dinshau, of Aden, who presented it to the National Collection.—Ed.

Pleurotoma cecchi, Jouss.

, cingulifera, Lk.

* .. Jousscaumi, Melv.

,, latisinuata, E. Smith.

,, Makimonos, Jouss. ,, obtusicostata, Smith.

,, otitoma, Jouss. ,, Pouloensis, Jouss.

,. tigrina, Lk.

,, tuberculata, Gray. ,, unifasciata, Smith.

., variabilis, Smith.

,, vidua, Rve. ,, violacca, Hinds.

Defrancia carinulata, Souverb.

.. foraminata, Rve. ,, Horneana, E. Smith.

., nexa, Rve.

.. Philippinensis, Rve. rubicunda, Gould.

Daphnella Boholensis, Rve.

,, citharella, lk.

,, crebriplicata, Rve. ,, Cumingi, Powis. ,, cylindrica, Rve.

., eytinarica, Rve. ., fenestrata, Melv. ., rissoides, Rve.

Triton antiquatus, Hinds.

,, aquatilis, Rve. ,, bracteatus, Hinds. ,, cancellatus, Lk.

,, v. decipiens, Rve.

,, clandestinus, Chem. ,, convolutus, Brod.

,, labiosus, Wood.

,, maculosus, Chem. ,, pilearis, L.

,, Ranzani, Biane.: from So-

,, retusus, Lk.

., rubecula, L.

.. trilineatus, Rve.

., respaceus, Lk. Persona adieus, Jouss.

., Shoplandi, Jouss.

Ranella anceps, Lk.

., concinna, Dunker.

.. granifera, Lk.

.. tivida, Rve.

Ranella spinosa, Lk.

,, tuberculata, Brod.

Bullia Mauritiana, Gray. , Tahitensis, Gmel.

Phos roseatus, Hinds. Cyllene Grayi, Rve.

Nassa albescens, v. fenestrata, Dkr.

,, arcularia, L. ,, calata, A. Ad.

,, concinna, Powis.

,, dermestina, Gould. ,, Erythræa, Issel.

,, fissilabris, Λ. Ad., gemmulata, Lk.

.. lentiginosa, A. Ad., Marrati, Smith.

,, nodifera, Powis. ,, papillosa, L. ,, persica, Mart.

., polychroma, Melv.

,, pulla, L.

,, rariegata, A. Ad. ,, rerrucosa, A. Ad. ,, Zailzensis, Jouss.

Eburna Borneensis, Sowb. Valentiana, Swain.

Purpura echinata, Blain.

,, fasciata, Dkr. ,, hippocastanum, L. ,, mancinella, Lk. ,, persica, L.

,, Rudolphi, Lk. ,, sacellum, Chem.

Ricinula chrysostoma, Desh.

., concatenata, Lk. .. elata, Blain.

, fiscellum, Chem.

* ., indigoferum, Melv.

,, lobata, Blain.

,, marginatum-altigona, Jouss.

, nodulosa, C. B. Ad. ricinus, L.

,, tuberculata, Blain. ,, undata, Chem.

Rapana bulbosa, Sol.

*Coralliophila Arabica, Melv.

.. costularis, Lk.

,, squamulasa, Rve.

Magilus antiquus, I.k.
Oliva bulbosa, Jouss.: from Berbera.

, inflata, Lk.

Ancillaria acuminata, Sowb.

,, albisulcata, Sowb.

,, exigua, Sowb. ,, fulva, Swain. ,, ovalis, Sowb.

,, striolata, Sowb.

Fasciolaria trapezium, L. Latirus Forskali, Tapp.-Can.

", Paulucciæ, Tapp.-Can.

,, polygonus, L. ,, smaragdulus, L. ,, turritus, Gmel. Vasum cornigerum, Lk.

Mitra affinis, Rve.

,, amabilis, Rve. ,, armillata, Rve. ,, aurantia, Gmel.

,, aureolata, Swain.

,, bella, Pse. ,, Bovei, Kien. ,, caligena, Rve. ,, carnicolor, Rve.

,, circulata, Kien. ,, clathrata, Rve.

,, concentrica, Rve. ,, coriacea, Rve.

,, crenifera, Lk. ,, crenulata, Chem.

,, cucumerina, Lk. ,, dermestina, Lk.

,, episcopalis, L., ericea, Pse.

,, ferruginea, Lk. ,, fissurata, Lk. ,, foveolata, Dkr.

,, fulvescens, Swain.

,, innesi, Jouss. ,, insculpta, A. Ad.

,, insculpta, A. Ad., interlirata, Rve.

,, literata, Lk. , lubens, Rve.

,, marginata, Sowb. ,, militaris, Rve.

,, militaris, Rve. ,, mucronata, Swain.

* ,, nebrias, Melv.

Mitra obeliscus, Rve.

,, Pacifica, Rve. ,, Pharaonis, A. Ad.

,, pretiosa, Rve. ,, procissa, Rve.

,, rotundilirata, Rve.

,, rufescens, A. Ad. ,, Ruppelli, Rve.

,, scabriuscula, Gray. ,, semifasciata, Lk.

,, Shoplandi, Melv. , tabanula, Lk.

;, turgida, Rve. ,, ustulata, Rve.

,, variegata, Sowb. ,, vexillum, Rve.

,, vulpecula, L. , xerampelina, Melv.

Marginella clandestina (near),

Broech.

,, Mazagonica, Melv.

,, obtusa, Sowb.: from Berbera.

,, scripta, Hinds. ,, Terveriana, Petit.

,, Verdensis, Smith.

Columbella albina, Kien. , albinodulosa, Gask.

,, albinodulosa, Gas ,, alveolata, Kien.

,, aspersa, Sowb. ,, astricta, Rve.

,, concinna, Rve. ,, conspersa, A. Ad.

,, cribraria, Lk. ,, fabula, Rve.

,, flava, Brug. ,, Hanleyi, Desh.

", ligula, Duel.", lyrata, Sowb.

,, mendicaria, L. , mercatoria, L.

,, miser, Sowb.

,, propinqua, Smith. ,, regulus, Souverb.

,, Terpsichore, Leathes.

,, zea, Melv. ,, zonata, Rve.

Harpa minor, Rumph.

Cassis exarata, Rve. Fauroti, Jouss. glauca, L. ,, pila, Rve. rufa, L. torquata, Rve. vibex, L. Dolium Quemanju, Jouss. Sycotypus ficoides, Lk. " ficus, L. Lamellaria perspicua, L. Natica cernica, Jouss. Chinensis, Lk. Colliei, Recl. ,, didyma, Bolt. 2 2 Forskali, Chem. ,, maculosa, Lk. 2 2 mamilla, L. ,, Marochiensis, Gmel. ,, melanostoma, Gmel. ,, plicatula, Nutt. ,, Powisiana, Recl. ,, pulicaris, Phil. simiæ, Chem. ,, tæniata, Menke. tela-aranea, Melv. Naticina panilla, Gmel. Sigaretus Cuvierianus, Recl. " planulatus, Reel. Scalaria clathrus, L. decussata, Lk. Acrilla gracilis, H. Ad. Terebra albomarginata, Desh. Babylonia, Lk. cærulescens, Lk. , , consobrina, Desh.

,, consobrina, Desh.
,, corrugata, Lk.
,, Gottoensis, E. Smith.
,, Lamareki, Kien.
,, ligata, Hinds.
,, nassoides, Hinds.
,, Pellyi, E. Smith.
,, Souleyeti, Desh.

,, straminea, Gray. ,, v. serotina, Ad. & Rye.

,, tessellata, Gray. ., textilis, Hinds. Pyramidella mitralis, A. Ad. ., Paeteli, Dhrn. Pyramidella propingua, A. Ad.

,, rariegata, A. Ad. Obeliscus dolabratus, L.

,, sulcatus, A. Ad. ,, terebelloides, A. Ad.

Ringicula acuta, Phil.

,, propinquans, Hinds. Elusa bruneomaculata, Melv.

* Aclis exæreta, Melv. Eulima acuta, Sowb.

,, brevis, Sowb. ,, Martini, A. Ad.

Shoplandi, Melv.
, solidula, Ad. & Rve.

*Leiostraca constellata, Melv. Stylifer exaratus, A. Ad.

,, fastigiatus, A. Ad., ,, solidulus, Ad. & Rve.

Solarium cylindraceum, Chem., dorsuosum, Hinds.

,, hybridum, L.

, infundibuliforme, Gmel.

,, lævigatum, Lk.

,, perspectiviunculum, Chem.

,, perspectivum, L. ,, regium, Hanley. ,, variegatum, Gmel.

Conus acuminatus, Hwass., Adansoni, Lk.

,, Adenessis, Smith. ,, arenatus, Hwass.

" betulinus, L.

,, bullatus, L.: from Berbera.

,, capitaneus, L. ,, catus, Hwass.

" Ceylonensis, Hwass.

", clytospira, Melv. & Stand.

,, Cuvieri, Crosse. ,, Erythræensis, Beck.

,, Eryinraensis, Beck. ,, v. adustus, Sowb.

., flavidus, Lk.

,, fumigatus (= Lagardi, Jouss.), Hwass.

,, gemmulatus, Sowb.: from Bulhar, 8 fms.

generalis, L.

,,

,, geographus, L. ,, inscriptus, Rve.

,, v. Keati, Sowb.

,, lineatus, Chem.

Cypræa histrio, Gmel. Conus lividus, Hwass. luotificus, Rve. Isabella, L. lentiginosa, Gray. miles, L. minimus, L. Lienardi, Jouss. " mitratus, Hwass. Listeri, Gray. ,, nemocanus, Hwass. lynx, L. Mauritiana, L. nussatella, L. 9 9 pusillus, Chem. microdon, Gray. ,, , , quadratomaculatus, Sowb.: moneta, L. ,, from Bulhar, 8 fms. nucleus. L. ,, quercinus, Hwass. ocellata, L. ,, pantherina, Sol. splendidulus, Sowb. ,, striatus, L. pulchra, Swain. ,, sulphuratus, Hwass. punctata, L. ,, Sumatrensis, Hwass. quadrimaculata, Gray. taniatus, Hwass. talpa, L. tessellatus, Hwass. tigris, L. ,, ,, textile, L. turdus, Lk. 99 Thomasi, Sowb. Turneri, Jouss. 22 Traversianus, Smith. undata, Lk. Strombus Belutschiensis, Melv. vitellus, L. ,, columba, Lk. zigzac, L. cylindricus, Swain. Trivia staphylea, L. dentatus, L. v. limacina, Lk. floridus, Lk. Ovula lactea, Lk. ,, fusiformis, Sowb. ovum, L. ,, qibberulus, L. Birostra spelta, L. ,, lineatus, Lk. Cuncellaria elegans, Sowb. ,, Mauritianus, Lk. hystrix, Rve. plicatus, Lk. melanostoma, Sowb. ,, Ruppelli, Rve. scalarina, Lk. ,, terebellatus, Sowb. Cerithium albovaricosum, Smith. ,, tricornis, Lk. asperum, L. urceus, L. bifasciatum, Sowb. variabilis, Swain. cæruleum, Sowb. Pterocera bryonia, Gmel. clypeomorus, Jouss. columna, Sowb. scorpio, L. Rostellaria curta, Sowb. contractum, Sowb. curvirostris, Lk. echinatum, Lk. ,, Cypræa clandestina, L. Erythræense, Lk. cruenta, v. coloba, Melv. fasciatum, Mart. ,, erosa, L., v. nebutes, Melv. fluviatile, Pot. Mich. ,, Erythræensis, Beck. Kochi, Phil. ,, ,, exusta, Sowb. lacteum, Kien. fabula, Kien. pingue, A. Ad.

recurvum, Sowb.

rostratum, Sowb.

Ruppelli, Phil.

scabridum, Phil.

Shoplandi, Melv.

, ,

,,

,, X

fimbriata, Gmel. ,, v. macula, A. Ad. ,, gangrenosa, Sol. 99 22

helvola, L.

,,

felina, Gmel.

Cerithium tuberculatum, L.
,, tuberosum, Fabr.
,, Yerburyi, Smith.
Vertagus codo-nulli, Sowb.

,, fasciatus, Brug.

*Bittium chrysomallum, Melv. Triforis cingulatus, A. Ad.

,, collaris, Hinds. ,, corrugatus, Hinds.

Littorina ahenea, Rve.

,, grano-costata, Rve. ,, Natalensis, Krauss.

,, scabra, L.

Modulus candidus, Petit.

Planaxis breviculus, Desh.

,, Savignyi, Desh. ,, sulcatus, Lk.

Rissoina Bertheloti, Aud.

, clathrata, A. Ad. concinna, A. Ad.

,, insculpta, Melv. & Stand.

,, insignis, Ad. & Rve. ,, pachystoma, Melv.

,, Sequenziana, Issel. ,, Sidmondiana, Issel. ,, spirata, Sowb.

,, spirata, Sowb. ,, tridentata (= curta, Sowb.), Mich.

Onoba delicata, Monteros. Turritella columnaris, Kien.

Turritella columnaris, Kien ,, maculata, Rve. Calyptræa cicatricosa, Rve.

* ,, Edgariana, Melv.

Crepidula Walshi (= Plana, Ad. & Rve.), Herms.

Narica cancellata, Chem., ligata, Reel.

Nerita chrysostoma, Recl.

,, plexa, Chem.

,, plexa, Chem. ,, polita, L.

,, Rumphi, Recl. Neritina feuilletti, Aud. Phasianella lineolata, Wood. Phasianella nivosa, Rve.

Turbo coronatus, v. granulata, Gmel.

,, elegans, Phil.

,, pustulatus, Rve. ,, rudiatus, Gmel.

Leptothyra læta, Montr.

,, pilula, Dkr.

* ,, Yemenensis, Melv. Rotella carneolata, Melv.

*Delphinula diplocostira, Melv.

Cardinalia virgata, Gmel.

Trochus dentatus, Forsk.: from Berbera.

,, infundibulum, v. Erythræus, Brocchi.

Clanculus Pharaonis, L. Monodonta dama, Phil.

,, obscura, Wood. Euchelus bicinctus, Phil.

,, Delpretei, Caramagna.

., proximus, A. Ad.

Thalotia Torresi, var., E. Smith. Zizyphinus scobinatus, A. Ad.

Agagus Agagus, Jouss. Gibbula Doria, Caramagna. Minolia Caifassii, Caramagna.

" rotellæformis, Phil. Margarita variabilis, A. Ad. Vitrinella Menegherii, Caramagna.

Haliotis multiperforata, Rve.

,, varia. L.

Fissurella Ruppelli, Sowb. Parmophorus unquis, L.

Parmophorus unguis, L Patella plumbea, Lk.

,, radians, Gmel. Buccinulus solidulus, L.

Hydatina physis, Lk.

Bulla ampulla, L. Atys cylindracea, Helb.

Atys cylindracea, 11c1b.

,, naucum, L. Umbrella Indica, Lk.

SCAPHOPODA.

PELECYPODA.

Pholadidea Fauroti, Jouss.
Parapholas quadrizonalis, Spglr.
Martesia striata, L.
Gustrochæna Ruppelli, Desh.
Aspergillum vaginiferum, Lk.
Solen brevis, Gray.

ten brevis, Gray.
,, corneus, Lk.
,, cultelus, L.
,, dactylus, Jonss.

" Gouldi, Conrad. " truncatus, Sowh.

Maehæra Japonica, Dkr. *Novaculina xyreces, Melv. Tugonia nobilis, A. Ad.

Corbula Tahitensis, Lk. Anatina hispidula, Cuy.

,, labiata, Rve. ,, subrostrata, Lk. *Thracia Adenensis, Melv. ,, Australica, Rve.

Mactra achatina, Chem.

,, crista, Jouss. ,, decora, Desh.

,, Fauroti, Jouss. ,, v. alba, Jouss.

Lutraria curta, Desh.
,, intermedia, Desh.

Standella Ægyptiaca, Chem.

,, capillacea, Desh. ,, Solanderi, Gray. Raëta Abercrombici, Melv.

Cacella Zebuensis, Desh.
Asaphis deflorata, L.

*Psammobia amianta, Melv.

,, contraria, Desh.

,, marmorea, Desh.

,, occidens, Chem.

,, rubicunda, Desh. ,, Weinkauffi, Crosse.

Soletellina Adamsi, Desh. Tellina Adenensis, Smith.

,, caseus, Sowb.

,, concentrica, Gould.

,, coxa, Jouss. ,, crucigera, Lk.

" Deshayesii, Hanley.

Tellina edentula, Spglr.

,, foliacea, L. holabana, Melv.

,, inflata, Chem.

,, lacunosa, Chem. .. manumissa, Melv.

, , manumissa, Melv.

,, micans, Hanley.

,, ostracea, Lk.

,, perplexa, Hanley. ,, Pharaonis, Hanley.

,, rastellum, Hanley.

,, rubella, Desh. rugosa, Born.

,, scobinata, L. ,, staurella, Lk.

,, subpallida, Smith.

,, sulcata, Wood.

,, virgata, L. ,, Yemenensis, Melv.

Donax clathratus, Rve.

,, Erythræus, Bertrand. scalpellum, Gray.

Scrobicularia Vaillanti, Jouss. Amphidesma Chinense, A. Ad.

,, crenatum, Ad. & Ang. ,, lamellosum, Sowb.

* ,, Shoplandi, Melv. *Cumingia occatilla, Melv.

Paphia glabrata, Desh. Mesodésma obtusum, Cross. & F.

Tivela ponderosa, Koch.
Meretrix lusoria, Chem.

Meretrix lusoria, Chem. Callista costata, Chem.

,, erycina, L. ,, florida, Lk.

" lilacina, Lk. " umbonella, Lk.

Caryatis Hebræa, Lk.

,, pura, Desh.

Lioconcha lentiginosa, Chem.

,, tigrina, Lk. Crista pectinata, L.

Circe Arabica, Chem. ... callipyga, Born.

Circe corrugata, Chem.

., intermedia, Rve.

" scripta, L.

,, ,, v. fulgurata, Rve. Sunetta contempta, E. Smith.

,, effossa, Hanley.

Tupes Deshayesi, Hanley.

,, disruptus, Sowb. ,, floridus, var., Lk. ,, geographieus, Gmel.

, litteratus, L.

., Malabaricus, Chem.

, obscuratus, Desh.

,, v. quadriradiata, Desh.

,, pinguis, Chem. ,, radiatus, Gmel.

" sulcosus, 1.k.

,, textrix, Chem. Anaitis foliacea, Phil. Chione crispata, Desh.

" Djiboutiensis, Jouss.

,, flammea, Lk. ,, Lamarcki, Gray. ,, lamellosa, Chem.

Dosinia alta, Dkr. ,, hepatica, Lk.

,, histrio, Gmel. ,, pubescens, Phil. ,, radiata, Rve.

Venerupis (Claudiconitra) madreporica, Jouss.

*Coralliophaga Arabica, Melv. ,, coralliophaga, Gmel.

decussata, Rve.

Petricola Hemprichi, Issel.

,, lyra, Melv.

Choristodon lapicidum, Chem.

Cardium assimile, Rve., Australe, Sowb.

.. lacunosum, Rve.

" pseudolima, Lk.

", rubicundum, var., Rve.

,, rugosum, Lk. Chama fragum, Rve.

,, gryphoides, L. Tridacna crocea, var., Lk.

" Cumingi, Rve.

Lucina concinna, H. Ad.

" dentifera, Jouss. " exasperata, Rve.

" Fischeriana, Issel.

", gemma, Rve.

,, Semperiana, Issel. Loripes clausa, Philippi. Diplodonta rotundata, Mont.

Pythina paula, A. Ad. Scintilla faba, Desh.

,, Obockensis, Jouss.

,, ovulina, Desh.

Crassatella radiata, Sowb. Cardita antiquata, Poli.

,, semiorbiculata, L.

,, sulcata, Lk.

,, variegata, Brug. Mytilicardia gubernaculum, Rve.

Mytilus ater, Zeleb. ,, pictus, Born.

Crenella Cumingiana, Dkr. Modiola aurienlata, Krauss.

", lignea, Rve.

,, Siræhensis, Jouss. Lithodomus cinnamomina, Lk.

" Erythræensis, Jouss. " lithophagus, var., Lk. Septifer excisus, Wiegm.

Avicula marmorata, Rve. Meleugrina margaritifera, L. Malleus albus, Lk.

Crenatula picta, Gmel. Pinna alta, Sowb.

,, bicolor, Chem. ,, nigra, Chem.

Area navicularis, Brug.

,, scapha, Chem. , tortuosa, L.

,, zebra, Swain. Barbatia Domingensis, Lk.

, Helblingi, Chem.

., imbricata, Brug.

,, obliquata, Wood. Anomalocardia clathrata, Rve.

Anomalocardia elathrata, KVe. Scapharca Natalensis, Krauss. Cucullæa concamerata, Chem. Pectunculus pecteniformis, Lk.

* ,, tegulicius, Melv.

Pectunculina multistriata, Forsk. Leda sculpta, Issel. Pecten flabelloides, Rve.

,, Layardi, var., Rve., luculentus, var., Rve.

,, plica, L.

,, sanguinolentus, Gmel.

,, senatorius, Gmel.

,, Singaporinus, Sowb. ,, squamosus, v. lividus, Rve.

,, subplicatus, Sowb., Townsendi, Sowb.

,, Tranquebaricus, Gmel.

Lima paucicostata, Sowb.

,, scabra, Born.

,, tenera, Chem.

,, tenuis, H. Ad.

Plicatula imbricata, Menke. Pedum spondyloideum, Gmel.

Anomia achæus, Gray. Placuna placenta, Lk.

Vulsella lingua-felis, Rve. Ostraa crista-galli, L.

,, cucullata, Born.

,, hyotis, L.